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AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1. (Currently Amended) A molding process of a composite material including forming a high-thermal conductor eempeund and a room temperature magnetic refrigerant material compound, wherein said room temperature magnetic refrigerant material is nested with said high-thermal-conductor to obtain said composite material; and wherein said room temperature refrigerant material or high thermal conductor is processed to a shape of particles particle, sheets sheet, strips, or filaments filament having a minimum sectional size of from diameter or thickness greater than 0.001 mm, to 0.1 mm and the composite material is in a shape of particle, sheet unit, or filament having a diameter or thickness smaller than 1 mm.
- 2. (Currently Amended) The molding process of claim 1, wherein the melting point of said high-thermal conductor eempound is higher or lower than that of said room temperature magnetic refrigerant material eempound; melting said lower melting point compound high-thermal-conductor under a vacuum or an inert atmosphere; adding said higher melting point compound room temperature magnetic refrigerant material to said melted eempound high-thermal conductor; cooling said melted eempound high-thermal conductor containing said higher melting point compound room temperature magnetic refrigerant material under a vacuum or inert atmosphere and forming a solid; and machining said solid to small balls having diameters of less than 0.5 mm.
- 3. (Currently Amended) The molding process of claim 1, wherein said composite material is obtained by <u>preparing at least two high-thermal-conductor sheets</u>, adding said room temperature refrigerant material to a liquid thermal conductive agent, sealing said liquid thermal conductive agent containing said

magnetic refrigerant material between said at least two high-thermal-conductor sheets and compressing them into sheet units of thickness less than 1 mm; and dividing said sheets into small isolated areas by completely pressing together the said sheet units at designated points stacking multiple sheet units and creating salient points between said sheet units to form liquid paths; said sheet unit comprising two said high thermal conductor sheets and a liquid thermal conductive agent therebetween; said liquid thermal conductive agent including superparamagnetism or ferromagnetism room temperature magnetic refrigerant particles, sheets or filaments; and pressing said sheet units completely together at designated points and forming small isolated areas.

- 4. (Currently Amended) The molding process of claim 1, wherein including processing said room temperature magnetic refrigerant material is processed to into sheets, strips or filaments; inserting said high-thermal-conductor is inserted between said sheets, strips or filaments; and wherein said high-thermal-conductor and said sheets, strips or filaments contact each other closely.
- (Cancelled).
- 6. (Currently Amended) The molding process of claim 3, wherein said <u>room</u> temperature magnetic refrigerant material comprises super-paramagnetism or ferromagnetism room temperature magnetic refrigerant material <u>and</u> is cut, crushed, ball grinded, plasma spray coated or processed by physical or chemical methods to form said particles with the particles size greater than 0.0001 mm; preparing said high-thermal conductor—sheets, adding—said—particles—to—said—liquid—thermal conductive—agent, sealing—said—liquid thermal conductive—agent containing—said magnetic refrigerant material between said two high thermal conductor sheets and compressing them into sheet units of thickness less than 1 mm; dividing said sheets into small isolated areas by completely pressing together the said sheet units at said designated points, stacking said sheet units and creating salient points between said sheet units to form said liquid path; said sheets are comprised of copper, the height

of the salient points is not more than the thickness of the sheet units and a metal powder having a particle size of 0.1-1 mm is spread therebetween; and the thickness of the stacked sheet units being between 1 mm and 100 mm.

- 7. (Currently Amended) The molding process of claim 3, wherein the thickness of said sheets is less than 0.1 mm[[;]], and the thickness of said sheet units is less than 0.2 mm; the thickness of said stacked sheet units is between 1 mm and 100 mm; and said fluid paths exist between said sheet units.
- 8. (Cancelled).
- 9. (Currently Amended) The molding process of claim 4, wherein said room temperature magnetic refrigerant material is gadolinium, wherein said high-thermal-conductor is copper; [[and]] wherein the thickness of a gadolinium sheets is 5-100 µm; wherein the thickness of a copper sheet is 5-100 µm; and wherein said gadolinium sheets and said copper sheets are stacked alternately together.
- 10. (Currently Amended) The molding process of claim 4, wherein said room temperature magnetic refrigerant material is gadolinium, wherein said high-thermal-conductor is copper; and inserting an aluminum foil between said gadolinium and said copper sheet sheets; and compressing and heating the resulting stacked sheet to at least 934 K to melt said aluminum foil and to obtain a closer contact between said gadolinium and said copper sheet
- 11. (Currently Amended) The molding process of claim 10, wherein including processing said stacked sheets are processed to into honeycombed shape.
- 12. (Currently Amended) The molding process of claim 2, wherein the surface of said balls is plated with a layer of an oxidation proof metal.

13. (New) A process for making a composite material, comprising:

preparing at least two high-thermal-conductor sheets, adding a room temperature refrigerant material to a liquid thermal conductive agent, sealing said liquid thermal conductive agent containing said magnetic refrigerant material between said at least two high-thermal conductor sheets and compressing them into sheet units of thickness less than 1 mm; and dividing said sheets into small isolated areas by completely pressing together said sheet units at designated points; wherein said room temperature refrigerant material is processed to a shape of a particle, sheet, or filament having a diameter or thickness greater than 0.001 mm;

stacking said sheet units and creating salient points between said sheet units to form a liquid path; the height of the salient points being not more than the thickness of the sheet units, spreading a metal powder having a particle size of 0.1 mm to 1 mm between said sheet units; and the thickness of the stacked sheet units being between 1 mm and 100 mm.

14. (New) The process of claim 13, wherein said room temperature magnetic refrigerant material comprises super-paramagnetism or ferromagnetism room temperature magnetic refrigerant material, and said high-thermal-conductor sheets are comprised of copper.